



**1988[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2015-1988; Directorate Identifier 2015-NM-085-AD; Amendment 39-18195; AD 2015-13-08]**

**RIN 2120-AA64**

**Airworthiness Directives; Dassault Aviation Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), Department of Transportation (DOT).

**ACTION:** Final rule; request for comments.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Dassault Aviation Model FALCON 2000EX airplanes. This AD requires revising the airplane flight manual to include a procedure for addressing minimum fan speed rotation (N1) values during stand-alone engine anti-ice system operation for engines equipped with certain air inlets. This AD was prompted by a quality review of recently delivered airplanes which identified a manufacturing deficiency of some engine air inlet anti-ice piccolo tubes. We are issuing this AD to detect and correct reduced performance of the engine anti-ice protection system, leading to ice accretion and ingestion into the engines, which could result in dual engine power loss and consequent reduced controllability of the airplane.

**DATES:** This AD becomes effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

We must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-1988; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments

received, and other information. The street address for the Docket Operations office

(telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1137; fax 425-227-1149.

**SUPPLEMENTARY INFORMATION:**

**Discussion**

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Emergency Airworthiness Directive 2015-0102-E, dated June 8, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Dassault Aviation Model FALCON 2000EX airplanes. The MCAI states:

A quality review of recently delivered aeroplanes identified a manufacturing deficiency of some engine air inlet anti ice piccolo tubes.

This condition, if not detected and corrected, could lead to reduced performance of the engine anti-ice protection system, with consequent ice accretion and ingestion, possibly resulting in dual engine power loss and reduced control of an aeroplane.

The Falcon 2000EX Aircraft Flight Manual (AFM) contains a procedure 4-200-05, “Operations in Icing Conditions”, addressing minimum fan speed rotation (N1) during combined operation of wing anti-ice and engine anti-ice systems. However, the AFM does not specify minimum N1 values for stand-alone engine anti-ice system operation. The subsequent investigation demonstrated that the operation of an engine at or above the minimum N1

value applicable for combined wing and engine anti-ice operations, provides efficient engine anti ice performance during stand-alone engine anti-ice operation, for engines equipped with an air inlet affected by the manufacturing deficiency.

For the reasons described above, this [EASA] AD requires amendment of the applicable AFM which can be removed (or is not applicable) for aeroplanes having both engine air inlet[s] marked “NRK” on the associated data plate.

This [EASA] AD is considered to be an interim measure and further AD action may follow.

You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-1988.

#### **FAA’s Determination and Requirements of this AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are issuing this AD because we evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **FAA’s Determination of the Effective Date**

An unsafe condition exists that requires the immediate adoption of this AD. The FAA has found that the risk to the flying public justifies waiving notice and comment prior to adoption of this rule because the identified unsafe condition could result in engine inlet ice accretion with possible ice separation in volumes beyond

engine ingestion capability. These conditions could lead to engine damage or engine shutdown. Therefore, we determined that notice and opportunity for public comment before issuing this AD are impracticable and that good cause exists for making this amendment effective in fewer than 30 days.

### **Comments Invited**

This AD is a final rule that involves requirements affecting flight safety, and we did not precede it by notice and opportunity for public comment. We invite you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2015-1988; Directorate Identifier 2015-NM-085-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this AD. We will consider all comments received by the closing date and may amend this AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this AD.

### **Costs of Compliance**

We estimate that this AD affects 120 airplanes of U.S. registry.

We also estimate that it will take about 1 work-hour per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$10,200, or \$85 per product.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

**List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

**Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

**PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

**§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2015-13-08 Dassault Aviation:** Amendment 39-18195. Docket No. FAA-2015-1988; Directorate Identifier 2015-NM-085-AD.

**(a) Effective Date**

This AD becomes effective [INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to all Dassault Aviation Model FALCON 2000EX airplanes,



certificated in any category.

**(d) Subject**

Air Transport Association (ATA) of America Code 30, Ice and Rain Protection.

**(e) Reason**

This AD was prompted by a quality review of recently delivered airplanes which identified a manufacturing deficiency of some engine air inlet anti-ice piccolo tubes. We are issuing this AD to detect and correct reduced performance of the engine anti-ice protection system, leading to ice accretion and ingestion into the engines, which could result in dual engine power loss and consequent reduced controllability of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Airplane Flight Manual (AFM) Revision**

(1) Within 10 flight cycles after the effective date of this AD: Revise the Limitations Section of the Dassault Falcon 2000EX AFM to include the statement in figure 1 to this paragraph. This may be done by inserting a copy of this AD in the AFM. When a statement identical to that in figure 1 to this paragraph has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

**Figure 1 to Paragraph (g) of this AD—New AFM Language**

Amendment to AFM sections 4-200-05, 4-200-05A, OPERATION IN ICING CONDITIONS. This amendment comes in addition to existing AFM procedures.

**Engine Anti-Ice System Operation**

During in-flight operation of an engine anti-ice system (ENG ANTI-ICE) maintain the N1 of both engines equal to or more than the values defined below, as applicable to atmospheric condition.

Minimum N1 values required during in-flight operation of an engine anti-ice system

<b>Z</b>	<b>TAT</b>			
	<b>-30° C</b>	<b>-15° C</b>	<b>0° C</b>	<b>+10° C</b>
31,000 ft	72.6	65.6	50.8	50.8
22,000 ft	70.4	61.7	50.8	50.1
3,000 ft	55.3	52.9	47.4	46.8
0 ft	52.9	52.9	47.4	46.8

***TAT – Total air temperature, Z – Altitude***

Note 1: Maintaining the N1 above the minimum anti-ice N1 on both engines may lead to exceedance of approach speed. Early approach or landing configuration of an airplane and/or application of airbrakes may be used to control the excessive airspeed. If the airspeed remains higher than required, it is authorized to reduce the thrust by reducing the N1 below the values indicated in the table in this figure for **the last 3 minutes before touchdown**. In this case, disengage Autothrottle if previously engaged. This 3 minutes operation below the minimum N1 does not apply to any other in-flight icing situation.

Note 2: During ground operations before takeoff, the engine anti-ice system remains efficient when engine power levers are at idle.

(2) Airplanes on which the air engine inlet on both engines has a mark “NRK” on the associated data plate are not affected by the requirements in paragraph (g)(1) of this AD.

Note 1 to paragraph (g)(2) of this AD: Engine air inlets which have been refurbished and comply with the design standard are marked as “NRK” on the air inlet data plate.

**(h) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, International Branch, ANM-116, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1137; fax (425) 227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Contacting the Manufacturer:** For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method

approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Dassault Aviation's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

**(i) Related Information**

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Emergency Airworthiness Directive 2015-0102-E, dated June 8, 2015, for related information. You may examine the MCAI on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-1988.

**(j) Material Incorporated by Reference**

None.

Issued in Renton, Washington, on June 19, 2015.

Michael Kaszycki,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2015-15860 Filed: 6/29/2015 08:45 am; Publication Date: 6/30/2015]